

## Class B Biosolids Report 2014

ANALYTICAL PARAMETER	BIOSOLIDS CONCENTRATION DRY WEIGHT (MG/KG)	CLASS A 503 LIMITS**	UNITS
Arsenic	6.52	75	mg/kg
Cadmium	0.00	85	mg/kg
Chromium	39.3	N/A	mg/kg
Copper	466	4300	mg/kg
Lead	10.2	840	mg/kg
Mercury	0.11	57	mg/kg
Molybdenum	10.4	75	mg/kg
Nickel	19.7	420	mg/kg
Potassium	8592	N/A	mg/kg
Selenium	6.63	100	mg/kg
Zinc	590	7500	mg/kg
pH	6.33	N/A	units
Total Solids (TS)	966000	N/A	mg/kg
Ammonia-N	10352	N/A	mg/kg
Nitrate as N	8.18	N/A	mg/kg
Total Kjeldahl Nitrogen	52795	N/A	mg/kg
Total Phosphorus	31056	N/A	mg/kg
Fecal Coliform Assay*	118	<2.0X10 <sup>6</sup>	MPN / g

**All data reported on a dry weight basis**

\* Geometric mean for assay data

\*\* Ceiling concentrations for metals limits

N/A - Sludge limit is not applicable to class B specifications.



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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

21 August 2014

Tracy, City of - Water Treatment Plant

Attn: Erich Delmas

3900 Holly Drive

Tracy, CA 95304

RE: WWTP Sludge Drying Beds

Work Order: 14H0430

Enclosed are the results of analyses for samples received by the laboratory on 08/06/14 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore  
Project Manager



alpha

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Composite Drying Beds	14H0430-01	Soil	08/06/14 11:04	08/06/14 21:45
S3	14H0430-02	Soil	08/06/14 11:08	08/06/14 21:45
S4	14H0430-03	Soil	08/06/14 11:06	08/06/14 21:45
S5	14H0430-04	Soil	08/06/14 11:05	08/06/14 21:45
S6	14H0430-05	Soil	08/06/14 11:02	08/06/14 21:45
N4	14H0430-06	Soil	08/06/14 11:18	08/06/14 21:45
N5	14H0430-07	Soil	08/06/14 11:17	08/06/14 21:45
N6	14H0430-08	Soil	08/06/14 11:16	08/06/14 21:45

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Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Metals by EPA 6000/7000 Series Methods**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												
Arsenic	6.3	0.40	2.0	2.0	mg/kg	1	AH41336	08/13/14 09:31	08/13/14 16:05	EPA 6010B	MAM	
Cadmium	ND	7.0	100	1.0	"	100	"	"	08/14/14 11:04	"	"	U
Chromium	38	0.090	5.0	5.0	"	1	"	"	08/13/14 16:05	"	"	
Copper	450	0.20	10	10	"	"	"	"	"	"	"	
Lead	9.9	0.10	5.0	5.0	"	"	"	"	"	"	"	
Mercury	0.11	0.020	0.20	0.20	"	"	AH41427	08/15/14 10:14	08/18/14 15:29	EPA 7471A	JJM	J
Molybdenum	10	0.050	10	10	"	"	AH41336	08/13/14 09:31	08/13/14 16:05	EPA 6010B	MAM	
Nickel	19	0.20	10	10	"	"	"	"	"	"	"	
Phosphorus	30000	300	5000	50	"	100	"	"	08/14/14 11:04	"	"	
Potassium	8300	2.0	50	50	"	1	"	"	08/13/14 16:05	"	"	
Selenium	6.4	0.70	2.0	2.0	"	"	"	"	"	"	"	
Zinc	570	0.40	10	10	"	"	"	"	"	"	"	

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Project Number: [none]

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08/21/14 16:15

**Conventional Chemistry Parameters by APHA/EPA Methods**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												
<b>% Solids</b>	<b>96.6</b>	0.100	0.100	0.100	%	1	AH42024	08/20/14 07:13	08/21/14 12:40	EPA 160.3	AEA	
<b>Ammonia as N</b>	<b>10000</b>	2.0	2.0	2.0	mg/kg	"	AH41849	08/19/14 08:00	08/19/14 12:00	SM4500NH3C	EV	
<b>Biochemical Oxygen Demand</b>	<b>34000</b>	2.0	5.0	5.0	"	"	AH41410	08/08/14 08:00	08/13/14 15:00	SM5210B	AEA	
<b>pH</b>	<b>6.33</b>	1.68	1.68	1.68	pH Units	"	AH41127	08/11/14 08:50	08/11/14 08:51	EPA 9045C	TLH	
<b>Total Kjeldahl Nitrogen</b>	<b>51000</b>	2.0	10	10	mg/kg	"	AH41403	08/14/14 07:07	08/18/14 09:03	SM4500-Norg B	SMS	

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Project Number: [none]

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**Anions by EPA Method 300.0**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												
Nitrate as N	7.9	0.40	2.0	2.0	mg/kg	1	AH41862	08/18/14 16:54	08/19/14 04:40	EPA 300.0	SMP	

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Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Microbiological Parameters by APHA Standard Methods**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>S3 (14H0430-02) Soil Sampled: 08/06/14 11:08 Received: 08/06/14 21:45</b>												
Total Coliforms	4.5		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/11/14 11:00	SM9221	ZMH	
Fecal Coliforms	ND		1.8	1.8	"	"	"	"	"	"	"	U
<b>S4 (14H0430-03) Soil Sampled: 08/06/14 11:06 Received: 08/06/14 21:45</b>												
Total Coliforms	> 1600000		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/09/14 13:00	SM9221	TCA	
Fecal Coliforms	1600000 0		1.8	1.8	"	"	"	"	"	"	"	
<b>S5 (14H0430-04) Soil Sampled: 08/06/14 11:05 Received: 08/06/14 21:45</b>												
Total Coliforms	14000		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/11/14 11:00	SM9221	ZMH	
Fecal Coliforms	11000		1.8	1.8	"	"	"	"	"	"	"	
<b>S6 (14H0430-05) Soil Sampled: 08/06/14 11:02 Received: 08/06/14 21:45</b>												
Total Coliforms	40000		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/10/14 13:45	SM9221	AEA	
Fecal Coliforms	18000		1.8	1.8	"	"	"	"	"	"	"	
<b>N4 (14H0430-06) Soil Sampled: 08/06/14 11:18 Received: 08/06/14 21:45</b>												
Total Coliforms	2.3		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/11/14 11:00	SM9221	ZMH	
Fecal Coliforms	ND		1.8	1.8	"	"	"	"	"	"	"	U
<b>N5 (14H0430-07) Soil Sampled: 08/06/14 11:17 Received: 08/06/14 21:45</b>												
Total Coliforms	12		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/10/14 13:45	SM9221	AEA	
Fecal Coliforms	ND		1.8	1.8	"	"	"	"	"	"	"	U
<b>N6 (14H0430-08) Soil Sampled: 08/06/14 11:16 Received: 08/06/14 21:45</b>												
Total Coliforms	2.3		1.8	1.8	MPN/100 mL	1	AH41231	08/07/14 11:00	08/11/14 11:00	SM9221	ZMH	
Fecal Coliforms	ND		1.8	1.8	"	"	"	"	"	"	"	U

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3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Volatile Organic Compounds by EPA Method 8260B**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
Acetone	ND	0.083	0.69	0.0040	mg/kg	173.2	AH41149	08/11/14 14:46	08/11/14 23:38	EPA 8260B	NBH	U
Benzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Bromobenzene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
Bromochloromethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Bromodichloromethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Bromoform	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Bromomethane	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
n-Butylbenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
sec-Butylbenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
tert-Butylbenzene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
Carbon tetrachloride	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Chlorobenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Chloroethane	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
Chloroform	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Chloromethane	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
2-Chlorotoluene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
4-Chlorotoluene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
Dibromochloromethane	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,2-Dibromo-3-chloropropane	ND	0.014	0.17	0.0010	"	"	"	"	"	"	"	U
1,2-Dibromoethane (EDB)	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Dibromomethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,2-Dichlorobenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,3-Dichlorobenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,4-Dichlorobenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Dichlorodifluoromethane	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
1,1-Dichloroethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,2-Dichloroethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,1-Dichloroethene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
cis-1,2-Dichloroethene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
trans-1,2-Dichloroethene	ND	0.021	0.17	0.0010	"	"	"	"	"	"	"	U
1,2-Dichloropropane	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,3-Dichloropropane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U

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3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Volatile Organic Compounds by EPA Method 8260B**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
2,2-Dichloropropane	ND	0.010	0.17	0.0010	mg/kg	173.2	AH41149	08/11/14 14:46	08/11/14 23:38	EPA 8260B	"	U
1,1-Dichloropropene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
cis-1,3-Dichloropropene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
trans-1,3-Dichloropropene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Ethylbenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Hexachlorobutadiene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
Isopropylbenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
p-Isopropyltoluene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Methyl ethyl ketone	ND	0.042	0.52	0.0030	"	"	"	"	"	"	"	U
Methyl isobutyl ketone	ND	0.024	0.35	0.0020	"	"	"	"	"	"	"	U
Methyl tert-butyl ether	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Methylene chloride	ND	0.014	0.17	0.0010	"	"	"	"	"	"	"	U
Naphthalene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
n-Propylbenzene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
Styrene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,1,1,2-Tetrachloroethane	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,1,2,2-Tetrachloroethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Tetrachloroethene	ND	0.014	0.17	0.0010	"	"	"	"	"	"	"	U
Toluene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,2,3-Trichlorobenzene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
1,2,4-Trichlorobenzene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
1,1,1-Trichloroethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
1,1,2-Trichloroethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Trichloroethene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
Trichlorofluoromethane	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Trichlorotrifluoroethane	ND	0.014	0.17	0.0010	"	"	"	"	"	"	"	U
1,2,3-Trichloropropane	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,2,4-Trimethylbenzene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U
1,3,5-Trimethylbenzene	ND	0.0069	0.17	0.0010	"	"	"	"	"	"	"	U
Vinyl chloride	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
m,p-Xylene	ND	0.010	0.17	0.0010	"	"	"	"	"	"	"	U
o-Xylene	ND	0.0035	0.17	0.0010	"	"	"	"	"	"	"	U

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**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
Xylenes (total)	ND	0.010	0.17	0.0010	mg/kg	173.2	AH41149	08/11/14 14:46	08/11/14 23:38	EPA 8260B	"	U
Surrogate: Bromofluorobenzene		139 %		38-163			"	"	"	"	"	
Surrogate: Dibromofluoromethane		130 %		39-154			"	"	"	"	"	
Surrogate: Toluene-d8		144 %		51-161			"	"	"	"	"	

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Organochlorine Pesticides and PCBs by EPA Method 8081/8082**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil Sampled: 08/06/14 11:04 Received: 08/06/14 21:45</b>												<b>R-06</b>
Aldrin	ND	0.12	0.88	0.0050	mg/kg	177	AH41415	08/14/14 08:19	08/19/14 21:56	EPA 8081/8082	MCB	U
alpha-BHC	ND	0.12	0.88	0.0050	"	"	"	"	"	"	"	U
beta-BHC	ND	0.12	0.88	0.0050	"	"	"	"	"	"	"	U
delta-BHC	ND	0.11	0.88	0.0050	"	"	"	"	"	"	"	U
gamma-BHC (Lindane)	ND	0.12	0.88	0.0050	"	"	"	"	"	"	"	U
Chlordane (tech)	ND	7.1	35	0.20	"	"	"	"	"	"	"	U
4,4'-DDD	ND	0.35	0.88	0.0050	"	"	"	"	"	"	"	U
4,4'-DDE	ND	0.16	0.88	0.0050	"	"	"	"	"	"	"	U
4,4'-DDT	ND	0.18	0.88	0.0050	"	"	"	"	"	"	"	U
Dieldrin	ND	0.16	0.88	0.0050	"	"	"	"	"	"	"	U
Endosulfan I	ND	0.35	0.88	0.0050	"	"	"	"	"	"	"	U
Endosulfan II	ND	0.14	0.88	0.0050	"	"	"	"	"	"	"	U
Endosulfan sulfate	ND	0.18	0.88	0.0050	"	"	"	"	"	"	"	U
Endrin	ND	0.35	0.88	0.0050	"	"	"	"	"	"	"	U
Endrin aldehyde	ND	0.12	0.88	0.0050	"	"	"	"	"	"	"	U
Heptachlor	ND	0.35	0.88	0.0050	"	"	"	"	"	"	"	U
Heptachlor epoxide	ND	0.18	0.88	0.0050	"	"	"	"	"	"	"	U
Methoxychlor	ND	0.35	0.88	0.0050	"	"	"	"	"	"	"	U
Toxaphene	ND	3.5	35	0.20	"	"	"	"	"	"	"	U
PCB-1016	ND	0.010	0.20	0.20	"	1	"	"	08/19/14 21:34	"	"	U
PCB-1221	ND	0.0070	0.20	0.20	"	"	"	"	"	"	"	U
PCB-1232	ND	0.010	0.20	0.20	"	"	"	"	"	"	"	U
PCB-1242	ND	0.0070	0.20	0.20	"	"	"	"	"	"	"	U
PCB-1248	ND	0.020	0.20	0.20	"	"	"	"	"	"	"	U
PCB-1254	ND	0.020	0.20	0.20	"	"	"	"	"	"	"	U
PCB-1260	ND	0.0090	0.20	0.20	"	"	"	"	"	"	"	U
Surrogate: Dibutylchlorodane		192 %		50-120			"	"	08/19/14 21:56	"	"	S-06

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Semivolatile Organic Compounds by EPA Method 8270C**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
Acenaphthene	ND	2.0	6.2	0.062	mg/kg	100	AH41320	08/13/14 06:41	08/20/14 16:31	EPA 8270C	NBH	U
Acenaphthylene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
Anthracene	ND	1.0	6.2	0.062	"	"	"	"	"	"	"	U
Benzidine	ND	50	160	1.6	"	"	"	"	"	"	"	U
Benzo (a) anthracene	ND	2.0	33	0.33	"	"	"	"	"	"	"	U
Benzo (a) pyrene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Benzo (b) fluoranthene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Benzo (g,h,i) perylene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Benzo (k) fluoranthene	ND	5.0	6.2	0.062	"	"	"	"	"	"	"	U
Benzoic acid	ND	60	160	1.6	"	"	"	"	"	"	"	U
Benzyl alcohol	ND	20	66	0.66	"	"	"	"	"	"	"	U
Bis(2-chloroethoxy)methane	ND	20	33	0.33	"	"	"	"	"	"	"	U
Bis(2-chloroethyl)ether	ND	20	33	0.33	"	"	"	"	"	"	"	U
Bis(2-chloroisopropyl)ether	ND	20	33	0.33	"	"	"	"	"	"	"	U
<b>Bis(2-ethylhexyl)phthalate</b>	<b>36</b>	9.0	33	0.33	"	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	20	33	0.33	"	"	"	"	"	"	"	U
Butyl benzyl phthalate	ND	20	33	0.33	"	"	"	"	"	"	"	U
4-Chloro-3-methylphenol	ND	20	33	0.33	"	"	"	"	"	"	"	U
4-Chloroaniline	ND	20	66	0.66	"	"	"	"	"	"	"	U
2-Chloronaphthalene	ND	20	33	0.33	"	"	"	"	"	"	"	U
2-Chlorophenol	ND	20	33	0.33	"	"	"	"	"	"	"	U
4-Chlorophenyl phenyl ether	ND	20	33	0.33	"	"	"	"	"	"	"	U
Chrysene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Di-n-butyl phthalate	ND	20	33	0.33	"	"	"	"	"	"	"	U
Di-n-octyl phthalate	ND	20	33	0.33	"	"	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
Dibenzofuran	ND	10	33	0.33	"	"	"	"	"	"	"	U
1,2-Dichlorobenzene	ND	20	33	0.33	"	"	"	"	"	"	"	U
1,3-Dichlorobenzene	ND	20	33	0.33	"	"	"	"	"	"	"	U
1,4-Dichlorobenzene	ND	20	33	0.33	"	"	"	"	"	"	"	U
3,3'-Dichlorobenzidine	ND	50	66	0.66	"	"	"	"	"	"	"	U
2,4-Dichlorophenol	ND	20	33	0.33	"	"	"	"	"	"	"	U

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Semivolatile Organic Compounds by EPA Method 8270C**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
Diethyl phthalate	ND	10	33	0.33	mg/kg	100	AH41320	08/13/14 06:41	08/20/14 16:31	EPA 8270C	"	U
Dimethyl phthalate	ND	20	33	0.33	"	"	"	"	"	"	"	U
2,4-Dimethylphenol	ND	20	33	0.33	"	"	"	"	"	"	"	U
4,6-Dinitro-2-methylphenol	ND	30	160	1.6	"	"	"	"	"	"	"	U
2,4-Dinitrophenol	ND	20	160	1.6	"	"	"	"	"	"	"	U
2,4-Dinitrotoluene	ND	10	33	0.33	"	"	"	"	"	"	"	U
2,6-Dinitrotoluene	ND	20	33	0.33	"	"	"	"	"	"	"	U
1,2-Diphenylhydrazine	ND	20	33	0.33	"	"	"	"	"	"	"	U
Fluoranthene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Fluorene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
Hexachlorobenzene	ND	10	33	0.33	"	"	"	"	"	"	"	U
Hexachlorobutadiene	ND	20	33	0.33	"	"	"	"	"	"	"	U
Hexachlorocyclopentadiene	ND	20	160	1.6	"	"	"	"	"	"	"	U
Hexachloroethane	ND	20	33	0.33	"	"	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
Isophorone	ND	20	33	0.33	"	"	"	"	"	"	"	U
2-Methylnaphthalene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
2-Methylphenol (o-cresol)	ND	20	33	0.33	"	"	"	"	"	"	"	U
3 & 4-Methylphenol (m,p-cresol)	ND	20	33	0.33	"	"	"	"	"	"	"	U
N-Nitrosodi-n-propylamine	ND	20	33	0.33	"	"	"	"	"	"	"	U
N-Nitrosodimethylamine	ND	30	66	0.66	"	"	"	"	"	"	"	U
N-Nitrosodiphenylamine	ND	20	33	0.33	"	"	"	"	"	"	"	U
Naphthalene	ND	2.0	6.2	0.062	"	"	"	"	"	"	"	U
2-Nitroaniline	ND	20	160	1.6	"	"	"	"	"	"	"	U
3-Nitroaniline	ND	30	160	1.6	"	"	"	"	"	"	"	U
4-Nitroaniline	ND	20	160	1.6	"	"	"	"	"	"	"	U
Nitrobenzene	ND	20	33	0.33	"	"	"	"	"	"	"	U
2-Nitrophenol	ND	30	160	1.6	"	"	"	"	"	"	"	U
4-Nitrophenol	ND	30	160	1.6	"	"	"	"	"	"	"	U
Pentachlorophenol	ND	20	160	1.6	"	"	"	"	"	"	"	U
Phenanthrene	ND	3.0	6.2	0.062	"	"	"	"	"	"	"	U
Phenol	ND	20	33	0.33	"	"	"	"	"	"	"	U

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Semivolatile Organic Compounds by EPA Method 8270C**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												<b>R-06</b>
Pyrene	ND	3.0	6.2	0.062	mg/kg	100	AH41320	08/13/14 06:41	08/20/14 16:31	EPA 8270C	"	U
1,2,4-Trichlorobenzene	ND	20	33	0.33	"	"	"	"	"	"	"	U
2,4,5-Trichlorophenol	ND	20	33	0.33	"	"	"	"	"	"	"	U
2,4,6-Trichlorophenol	ND	20	33	0.33	"	"	"	"	"	"	"	U
Surrogate: 2-Fluorobiphenyl		88.8 %		61-117			"	"	"	"	"	
Surrogate: 2-Fluorophenol		85.0 %		50-113			"	"	"	"	"	
Surrogate: Nitrobenzene-d5		92.5 %		47-123			"	"	"	"	"	
Surrogate: p-Terphenyl-d14		96.2 %		63-133			"	"	"	"	"	
Surrogate: Phenol-d6		77.5 %		49-119			"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		110 %		52-129			"	"	"	"	"	

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

**Additional Semivolatile Organic Compounds by EPA Method 8270C**  
**Alpha Analytical Laboratories, Inc.**

Analyte	Result	MDL	RL	ML	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
<b>Composite Drying Beds (14H0430-01) Soil    Sampled: 08/06/14 11:04    Received: 08/06/14 21:45</b>												
Pyridine	ND	15000	50000	500	mg/kg	100	AH41320	08/13/14 06:41	08/20/14 16:31	EPA 8270C	"	R-06, U
Surrogate: 2-Fluorobiphenyl		88.8 %	61-117				"	"	"	"	"	
Surrogate: 2-Fluorophenol		85.0 %	50-113				"	"	"	"	"	
Surrogate: Nitrobenzene-d5		92.5 %	47-123				"	"	"	"	"	
Surrogate: p-Terphenyl-d14		96.2 %	63-133				"	"	"	"	"	
Surrogate: Phenol-d6		77.5 %	49-119				"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		110 %	52-129				"	"	"	"	"	

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Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Metals by EPA 6000/7000 Series Methods - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41336 - EPA 3051 Microwave

##### Blank (AH41336-BLK1)

Prepared & Analyzed: 08/13/14

Arsenic	ND	0.40	2.0	mg/kg						U
Cadmium	ND	0.070	1.0	"						U
Chromium	ND	0.090	5.0	"						U
Copper	1.92	0.20	10	"						J
Lead	ND	0.10	5.0	"						U
Molybdenum	0.0690	0.050	10	"						J
Nickel	ND	0.20	10	"						U
Phosphorus	ND	3.0	50	"						U
Potassium	ND	2.0	50	"						U
Selenium	ND	0.70	2.0	"						U
Zinc	0.678	0.40	10	"						J

##### LCS (AH41336-BS1)

Prepared & Analyzed: 08/13/14

Arsenic	17.1	0.40	2.0	mg/kg	20.0		85.5	80-120		
Cadmium	18.4	0.070	1.0	"	20.0		92.1	85-115		
Chromium	17.6	0.090	5.0	"	20.0		88.0	85-115		
Copper	19.4	0.20	10	"	21.0		92.6	85-115		
Lead	18.7	0.10	5.0	"	20.0		93.5	85-115		
Molybdenum	17.1	0.050	10	"	20.0		85.7	85-115		
Nickel	17.2	0.20	10	"	20.0		86.2	85-115		
Phosphorus	213	3.0	50	"	200		107	85-115		
Potassium	749	2.0	50	"	800		93.6	85-115		
Selenium	17.2	0.70	2.0	"	20.0		86.0	68-118		
Zinc	19.9	0.40	10	"	20.0		99.5	85-115		

##### Duplicate (AH41336-DUP1)

Source: 14H0164-01

Prepared & Analyzed: 08/13/14

Arsenic	1.22	0.40	2.0	mg/kg		0.991		21.1	20	J
Cadmium	ND	0.070	1.0	"		ND			20	U
Chromium	15.7	0.090	5.0	"		12.3		23.9	20	QM-04
Copper	8.55	0.20	10	"		6.98		20.2	20	J
Lead	2.79	0.10	5.0	"		2.32		18.0	20	J
Molybdenum	0.371	0.050	10	"		0.252		38.2	20	J

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Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Metals by EPA 6000/7000 Series Methods - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41336 - EPA 3051 Microwave

##### Duplicate (AH41336-DUP1)

Source: 14H0164-01

Prepared & Analyzed: 08/13/14

Nickel	12.1	0.20	10	mg/kg		9.85		20.6	20	QM-04
Phosphorus	75.7	3.0	50	"		59.3		24.2	20	QM-04
Potassium	683	2.0	50	"		493		32.3	20	QM-04
Selenium	ND	0.70	2.0	"		ND			20	U
Zinc	12.5	0.40	10	"		8.81		34.5	20	QM-04

##### Matrix Spike (AH41336-MS1)

Source: 14H0164-01

Prepared & Analyzed: 08/13/14

Arsenic	20.3	0.40	2.0	mg/kg	20.0	0.991	96.7	70-130		
Cadmium	17.9	0.070	1.0	"	20.0	ND	89.4	70-130		
Chromium	33.0	0.090	5.0	"	20.0	12.3	103	70-130		
Copper	29.2	0.20	10	"	21.0	6.98	106	70-130		
Lead	21.4	0.10	5.0	"	20.0	2.32	95.4	70-130		
Molybdenum	19.1	0.050	10	"	20.0	0.252	94.0	70-130		
Nickel	30.4	0.20	10	"	20.0	9.85	103	70-130		
Phosphorus	269	3.0	50	"	200	59.3	105	70-130		
Potassium	1290	2.0	50	"	800	493	99.8	70-130		
Selenium	18.6	0.70	2.0	"	20.0	ND	92.9	7-107		
Zinc	28.1	0.40	10	"	20.0	8.81	96.5	70-130		

##### Matrix Spike (AH41336-MS2)

Source: 14H0959-01

Prepared: 08/13/14 Analyzed: 08/16/14

Arsenic	19.8	0.40	2.0	mg/kg	20.0	ND	98.8	70-130		
Cadmium	18.9	0.070	1.0	"	20.0	ND	94.4	70-130		
Chromium	44.7	0.090	5.0	"	20.0	21.7	115	70-130		
Copper	54.6	0.20	10	"	21.0	32.9	103	70-130		
Lead	20.5	0.10	5.0	"	20.0	1.55	94.9	70-130		
Molybdenum	19.7	0.050	10	"	20.0	0.772	94.6	70-130		
Nickel	45.9	0.20	10	"	20.0	23.2	113	70-130		
Phosphorus	521	3.0	50	"	200	322	99.6	70-130		
Potassium	2330	2.0	50	"	800	1430	113	70-130		
Selenium	19.9	0.70	2.0	"	20.0	1.55	92.0	7-107		
Zinc	107	0.40	10	"	20.0	84.7	112	70-130		

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Metals by EPA 6000/7000 Series Methods - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41336 - EPA 3051 Microwave

##### Matrix Spike Dup (AH41336-MSD1)

Source: 14H0164-01

Prepared & Analyzed: 08/13/14

Arsenic	19.7	0.40	2.0	mg/kg	20.0	0.991	93.5	70-130	3.18	20	
Cadmium	17.9	0.070	1.0	"	20.0	ND	89.4	70-130	0.00476	20	
Chromium	33.4	0.090	5.0	"	20.0	12.3	105	70-130	1.24	20	
Copper	28.6	0.20	10	"	21.0	6.98	103	70-130	2.03	20	
Lead	20.9	0.10	5.0	"	20.0	2.32	92.7	70-130	2.59	20	
Molybdenum	18.7	0.050	10	"	20.0	0.252	92.3	70-130	1.81	20	
Nickel	29.5	0.20	10	"	20.0	9.85	98.5	70-130	2.80	20	
Phosphorus	252	3.0	50	"	200	59.3	96.6	70-130	6.24	20	
Potassium	1290	2.0	50	"	800	493	99.1	70-130	0.491	20	
Selenium	18.2	0.70	2.0	"	20.0	ND	91.1	7-107	1.96	20	
Zinc	27.9	0.40	10	"	20.0	8.81	95.3	70-130	0.921	20	

#### Batch AH41427 - EPA 7471A Hg Soil

##### Blank (AH41427-BLK1)

Prepared: 08/15/14 Analyzed: 08/18/14

Mercury	ND	0.020	0.20	mg/kg							U
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##### LCS (AH41427-BS1)

Prepared: 08/15/14 Analyzed: 08/18/14

Mercury	0.950	0.020	0.20	mg/kg	1.00		95.0	80-120			
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##### Duplicate (AH41427-DUP1)

Source: 14H0596-04

Prepared: 08/15/14 Analyzed: 08/18/14

Mercury	0.205	0.020	0.20	mg/kg		0.190			7.59	20	
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##### Matrix Spike (AH41427-MS1)

Source: 14H0596-04

Prepared: 08/15/14 Analyzed: 08/18/14

Mercury	1.05	0.020	0.20	mg/kg	1.00	0.190	86.0	60-140			
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##### Matrix Spike Dup (AH41427-MSD1)

Source: 14H0596-04

Prepared: 08/15/14 Analyzed: 08/18/14

Mercury	1.10	0.020	0.20	mg/kg	1.00	0.190	91.0	60-140	4.65	20	
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Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41127 - General Preparation

##### Duplicate (AH41127-DUP1)

Source: 14H0044-01

Prepared & Analyzed: 08/11/14

pH	8.22	1.68	1.68	pH Units		8.22		0.00	20	
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#### Batch AH41403 - General Prep

##### LCS (AH41403-BS1)

Prepared: 08/14/14 Analyzed: 08/18/14

Total Kjeldahl Nitrogen	55500	2.0	10	mg/kg	56600	98.0	80-120			
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##### LCS Dup (AH41403-BSD1)

Prepared: 08/14/14 Analyzed: 08/18/14

Total Kjeldahl Nitrogen	55500	2.0	10	mg/kg	56600	98.0	80-120	0.00	20	
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#### Batch AH41410 - General Preparation

##### Blank (AH41410-BLK1)

Prepared: 08/08/14 Analyzed: 08/13/14

Biochemical Oxygen Demand	ND	2.0	5.0	mg/kg						U
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##### LCS (AH41410-BS1)

Prepared: 08/06/14 Analyzed: 08/11/14

Biochemical Oxygen Demand	206	2.0	5.0	mg/kg	200	103	84-115			
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##### Duplicate (AH41410-DUP1)

Source: 14H0430-01

Prepared: 08/08/14 Analyzed: 08/13/14

Biochemical Oxygen Demand	18600	2.0	5.0	mg/kg	33600			57.7	30	QM-04
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#### Batch AH41849 - General Preparation

##### Blank (AH41849-BLK1)

Prepared & Analyzed: 08/19/14

Ammonia as N	ND	0.050	0.050	mg/kg						U
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Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch AH41849 - General Preparation</b>										
<b>LCS (AH41849-BS1)</b>					Prepared & Analyzed: 08/19/14					
Ammonia as N	5.08	0.050	0.050	mg/kg	5.00	102	90-110			
<b>LCS Dup (AH41849-BSD1)</b>					Prepared & Analyzed: 08/19/14					
Ammonia as N	5.08	0.050	0.050	mg/kg	5.00	102	90-110	0.00	10	
<b>Batch AH42024 - General Preparation</b>										
<b>Blank (AH42024-BLK1)</b>					Prepared: 08/20/14 Analyzed: 08/21/14					
% Solids	ND	0.100	0.100	%						U
<b>Duplicate (AH42024-DUP1)</b>					Source: 14H0430-01 Prepared: 08/20/14 Analyzed: 08/21/14					
% Solids	96.2	0.100	0.100	%		96.6		0.456	20	

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Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Anions by EPA Method 300.0 - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch AH41862 - General Preparation</b>										
<b>Blank (AH41862-BLK1)</b>					Prepared & Analyzed: 08/18/14					
Nitrate as N	ND	0.40	2.0	mg/kg						U
<b>LCS (AH41862-BS1)</b>					Prepared & Analyzed: 08/18/14					
Nitrate as N	52.2	0.40	2.0	mg/kg	50.0	104	90-110			
<b>Duplicate (AH41862-DUP1)</b>					Source: 14H0705-03 Prepared: 08/18/14 Analyzed: 08/19/14					
Nitrate as N	6.79	0.40	2.0	mg/kg		6.79		0.00	20	
<b>Matrix Spike (AH41862-MS1)</b>					Source: 14H0705-03 Prepared: 08/18/14 Analyzed: 08/19/14					
Nitrate as N	56.3	2.0	10	mg/kg	50.0	6.79	99.0	80-120		
<b>Matrix Spike Dup (AH41862-MSD1)</b>					Source: 14H0705-03 Prepared: 08/18/14 Analyzed: 08/19/14					
Nitrate as N	56.3	2.0	10	mg/kg	50.0	6.79	99.0	80-120	0.0401	20

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3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41149 - VOAs in Soil GCMS

Blank (AH41149-BLK1)										Prepared & Analyzed: 08/11/14	R-11
Acetone	ND	0.083	0.69	mg/kg							U
Benzene	ND	0.0069	0.17	"							U
Bromobenzene	ND	0.010	0.17	"							U
Bromochloromethane	ND	0.0069	0.17	"							U
Bromodichloromethane	ND	0.0069	0.17	"							U
Bromoform	ND	0.0069	0.17	"							U
Bromomethane	ND	0.010	0.17	"							U
n-Butylbenzene	ND	0.0069	0.17	"							U
sec-Butylbenzene	ND	0.0069	0.17	"							U
tert-Butylbenzene	ND	0.0035	0.17	"							U
Carbon tetrachloride	ND	0.0069	0.17	"							U
Chlorobenzene	ND	0.0069	0.17	"							U
Chloroethane	ND	0.010	0.17	"							U
Chloroform	ND	0.0069	0.17	"							U
Chloromethane	ND	0.010	0.17	"							U
2-Chlorotoluene	ND	0.0069	0.17	"							U
4-Chlorotoluene	ND	0.0035	0.17	"							U
Dibromochloromethane	ND	0.0035	0.17	"							U
1,2-Dibromo-3-chloropropane	ND	0.014	0.17	"							U
1,2-Dibromoethane (EDB)	ND	0.0069	0.17	"							U
Dibromomethane	ND	0.0069	0.17	"							U
1,2-Dichlorobenzene	ND	0.0069	0.17	"							U
1,3-Dichlorobenzene	ND	0.0069	0.17	"							U
1,4-Dichlorobenzene	ND	0.0069	0.17	"							U
Dichlorodifluoromethane	ND	0.010	0.17	"							U
1,1-Dichloroethane	ND	0.0069	0.17	"							U
1,2-Dichloroethane	ND	0.0069	0.17	"							U
1,1-Dichloroethene	ND	0.0035	0.17	"							U
cis-1,2-Dichloroethene	ND	0.0069	0.17	"							U
trans-1,2-Dichloroethene	ND	0.021	0.17	"							U
1,2-Dichloropropane	ND	0.0035	0.17	"							U

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Project Number: [none]

Reported:  
08/21/14 16:15

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41149 - VOAs in Soil GCMS

Blank (AH41149-BLK1)										Prepared & Analyzed: 08/11/14	R-11
1,3-Dichloropropane	ND	0.0069	0.17	mg/kg							U
2,2-Dichloropropane	ND	0.010	0.17	"							U
1,1-Dichloropropene	ND	0.010	0.17	"							U
cis-1,3-Dichloropropene	ND	0.0069	0.17	"							U
trans-1,3-Dichloropropene	ND	0.0069	0.17	"							U
Ethylbenzene	ND	0.0069	0.17	"							U
Hexachlorobutadiene	ND	0.010	0.17	"							U
Isopropylbenzene	ND	0.0069	0.17	"							U
p-Isopropyltoluene	ND	0.0069	0.17	"							U
Methyl ethyl ketone	ND	0.042	0.52	"							U
Methyl isobutyl ketone	ND	0.024	0.35	"							U
Methyl tert-butyl ether	ND	0.0069	0.17	"							U
Methylene chloride	ND	0.014	0.17	"							U
Naphthalene	ND	0.0069	0.17	"							U
n-Propylbenzene	ND	0.0035	0.17	"							U
Styrene	ND	0.0035	0.17	"							U
1,1,1,2-Tetrachloroethane	ND	0.0035	0.17	"							U
1,1,2,2-Tetrachloroethane	ND	0.0069	0.17	"							U
Tetrachloroethene	ND	0.014	0.17	"							U
Toluene	ND	0.0069	0.17	"							U
1,2,3-Trichlorobenzene	ND	0.010	0.17	"							U
1,2,4-Trichlorobenzene	ND	0.010	0.17	"							U
1,1,1-Trichloroethane	ND	0.0069	0.17	"							U
1,1,2-Trichloroethane	ND	0.0069	0.17	"							U
Trichloroethene	ND	0.010	0.17	"							U
Trichlorofluoromethane	ND	0.0069	0.17	"							U
Trichlorotrifluoroethane	ND	0.014	0.17	"							U
1,2,3-Trichloropropane	ND	0.0035	0.17	"							U
1,2,4-Trimethylbenzene	ND	0.0035	0.17	"							U
1,3,5-Trimethylbenzene	ND	0.0069	0.17	"							U
Vinyl chloride	ND	0.010	0.17	"							U

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Project Number: [none]

Reported:  
08/21/14 16:15

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41149 - VOAs in Soil GCMS

Blank (AH41149-BLK1)					Prepared & Analyzed: 08/11/14					R-11
m,p-Xylene	ND	0.010	0.17	mg/kg						U
o-Xylene	ND	0.0035	0.17	"						U
Xylenes (total)	ND	0.010	0.17	"						U
Surrogate: Bromofluorobenzene	5.45			"	4.32		126	38-163		
Surrogate: Dibromofluoromethane	5.53			"	4.32		128	39-154		
Surrogate: Toluene-d8	5.87			"	4.32		136	51-161		

LCS (AH41149-BS1)					Prepared & Analyzed: 08/11/14					
Benzene	5.34	0.0069	0.17	mg/kg	5.00		107	58-143		
Chlorobenzene	5.17	0.0069	0.17	"	5.00		103	76-145		
1,1-Dichloroethene	5.33	0.0035	0.17	"	5.00		107	77-142		
Toluene	5.42	0.0069	0.17	"	5.00		108	55-158		
Trichloroethene	5.02	0.010	0.17	"	5.00		100	71-139		
Surrogate: Bromofluorobenzene	5.66			"	4.32		131	38-163		
Surrogate: Dibromofluoromethane	5.43			"	4.32		126	39-154		
Surrogate: Toluene-d8	5.93			"	4.32		137	51-161		

LCS Dup (AH41149-BSD1)					Prepared & Analyzed: 08/11/14					
Benzene	6.37	0.0069	0.17	mg/kg	5.00		127	58-143	17.6	25
Chlorobenzene	6.15	0.0069	0.17	"	5.00		123	76-145	17.3	25
1,1-Dichloroethene	6.28	0.0035	0.17	"	5.00		126	77-142	16.3	25
Toluene	6.39	0.0069	0.17	"	5.00		128	55-158	16.5	25
Trichloroethene	5.98	0.010	0.17	"	5.00		120	71-139	17.5	25
Surrogate: Bromofluorobenzene	5.90			"	4.32		137	38-163		
Surrogate: Dibromofluoromethane	5.71			"	4.32		132	39-154		
Surrogate: Toluene-d8	6.24			"	4.32		144	51-161		

Matrix Spike (AH41149-MS1)					Source: 14H0430-01					Prepared & Analyzed: 08/11/14
Benzene	5.54	0.0069	0.17	mg/kg	4.63	ND	120	37-149		
Chlorobenzene	5.47	0.0069	0.17	"	4.63	ND	118	44-157		
1,1-Dichloroethene	5.60	0.0035	0.17	"	4.63	ND	121	38-165		
Toluene	5.72	0.0069	0.17	"	4.63	ND	124	22-166		

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Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41149 - VOAs in Soil GCMS

##### Matrix Spike (AH41149-MS1)

Source: 14H0430-01

Prepared & Analyzed: 08/11/14

Trichloroethene	5.33	0.010	0.17	mg/kg	4.63	ND	115	51-146		
Surrogate: Bromofluorobenzene	5.37			"	4.00		134	38-163		
Surrogate: Dibromofluoromethane	4.97			"	4.00		124	39-154		
Surrogate: Toluene-d8	5.48			"	4.00		137	51-161		

##### Matrix Spike Dup (AH41149-MSD1)

Source: 14H0430-01

Prepared & Analyzed: 08/11/14

Benzene	5.32	0.0069	0.17	mg/kg	4.63	ND	115	37-149	4.01	25
Chlorobenzene	5.27	0.0069	0.17	"	4.63	ND	114	44-157	3.76	25
1,1-Dichloroethene	5.22	0.0035	0.17	"	4.63	ND	113	38-165	7.02	25
Toluene	5.49	0.0069	0.17	"	4.63	ND	119	22-166	4.03	25
Trichloroethene	5.10	0.010	0.17	"	4.63	ND	110	51-146	4.52	25
Surrogate: Bromofluorobenzene	5.12			"	4.00		128	38-163		
Surrogate: Dibromofluoromethane	4.77			"	4.00		119	39-154		
Surrogate: Toluene-d8	5.27			"	4.00		132	51-161		

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Organochlorine Pesticides and PCBs by EPA Method 8081/8082 - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch AH41415 - EPA 3540C Soxhlet</b>											
<b>Blank (AH41415-BLK1)</b>						Prepared: 08/14/14 Analyzed: 08/19/14					
Aldrin	ND	0.00070	0.0050	mg/kg							U
alpha-BHC	ND	0.00070	0.0050	"							U
beta-BHC	ND	0.00070	0.0050	"							U
delta-BHC	ND	0.00060	0.0050	"							U
gamma-BHC (Lindane)	ND	0.00070	0.0050	"							U
Chlordane (tech)	ND	0.040	0.20	"							U
4,4'-DDD	ND	0.0020	0.0050	"							U
4,4'-DDE	ND	0.00090	0.0050	"							U
4,4'-DDT	ND	0.0010	0.0050	"							U
Dieldrin	ND	0.00090	0.0050	"							U
Endosulfan I	ND	0.0020	0.0050	"							U
Endosulfan II	ND	0.00080	0.0050	"							U
Endosulfan sulfate	ND	0.0010	0.0050	"							U
Endrin	ND	0.0020	0.0050	"							U
Endrin aldehyde	ND	0.00070	0.0050	"							U
Heptachlor	ND	0.0020	0.0050	"							U
Heptachlor epoxide	ND	0.0010	0.0050	"							U
Methoxychlor	ND	0.0020	0.0050	"							U
Toxaphene	ND	0.020	0.20	"							U
PCB-1016	ND	0.010	0.20	"							U
PCB-1221	ND	0.0070	0.20	"							U
PCB-1232	ND	0.010	0.20	"							U
PCB-1242	ND	0.0070	0.20	"							U
PCB-1248	ND	0.020	0.20	"							U
PCB-1254	ND	0.020	0.20	"							U
PCB-1260	ND	0.0090	0.20	"							U
Surrogate: Dibutylchlorodate	0.0356			"	0.0378		94.2	50-120			

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Organochlorine Pesticides and PCBs by EPA Method 8081/8082 - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41415 - EPA 3540C Soxhlet

##### LCS (AH41415-BS1)

Prepared: 08/14/14 Analyzed: 08/19/14

Aldrin	0.0110	0.00070	0.0050	mg/kg	0.0120		91.6	30-143		
alpha-BHC	0.0109	0.00070	0.0050	"	0.0120		91.2	18-155		
beta-BHC	0.0120	0.00070	0.0050	"	0.0120		100	25-190		
delta-BHC	0.0108	0.00060	0.0050	"	0.0120		90.0	33-157		
gamma-BHC (Lindane)	0.0103	0.00070	0.0050	"	0.0120		86.1	33-134		
4,4'-DDD	0.0126	0.0020	0.0050	"	0.0120		105	41-139		
4,4'-DDE	0.0115	0.00090	0.0050	"	0.0120		96.0	39-146		
4,4'-DDT	0.0133	0.0010	0.0050	"	0.0120		111	42-146		
Dieldrin	0.0122	0.00090	0.0050	"	0.0120		101	39-138		
Endosulfan I	0.0124	0.0020	0.0050	"	0.0120		103	39-146		
Endosulfan II	0.0124	0.00080	0.0050	"	0.0120		103	43-142		
Endosulfan sulfate	0.0131	0.0010	0.0050	"	0.0120		109	45-148		
Endrin	0.00705	0.0020	0.0050	"	0.0120		58.8	41-164		
Endrin aldehyde	0.0113	0.00070	0.0050	"	0.0120		94.4	16-166		
Heptachlor	0.0128	0.0020	0.0050	"	0.0120		106	33-148		
Heptachlor epoxide	0.0116	0.0010	0.0050	"	0.0120		96.5	37-142		
Methoxychlor	0.0147	0.0020	0.0050	"	0.0120		123	36-148		

Surrogate: Dibutylchloroendate 0.0371 " 0.0378 98.2 50-120

##### LCS Dup (AH41415-BS1)

Prepared: 08/14/14 Analyzed: 08/19/14

Aldrin	0.0112	0.00070	0.0050	mg/kg	0.0120		93.5	30-143	2.07	30
alpha-BHC	0.0113	0.00070	0.0050	"	0.0120		94.3	18-155	3.40	30
beta-BHC	0.0121	0.00070	0.0050	"	0.0120		101	25-190	0.550	30
delta-BHC	0.0112	0.00060	0.0050	"	0.0120		93.5	33-157	3.79	30
gamma-BHC (Lindane)	0.0116	0.00070	0.0050	"	0.0120		96.9	33-134	11.8	30
4,4'-DDD	0.0132	0.0020	0.0050	"	0.0120		110	41-139	4.73	30
4,4'-DDE	0.0119	0.00090	0.0050	"	0.0120		98.8	39-146	2.88	30
4,4'-DDT	0.0148	0.0010	0.0050	"	0.0120		123	42-146	10.3	30
Dieldrin	0.0122	0.00090	0.0050	"	0.0120		101	39-138	0.0835	30
Endosulfan I	0.0127	0.0020	0.0050	"	0.0120		106	39-146	2.81	30
Endosulfan II	0.0128	0.00080	0.0050	"	0.0120		106	43-142	3.01	30

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Organochlorine Pesticides and PCBs by EPA Method 8081/8082 - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41415 - EPA 3540C Soxhlet

##### LCS Dup (AH41415-BS01)

Prepared: 08/14/14 Analyzed: 08/19/14

Endosulfan sulfate	0.0136	0.0010	0.0050	mg/kg	0.0120		114	45-148	3.81	30
Endrin	0.00573	0.0020	0.0050	"	0.0120		47.8	41-164	20.6	30
Endrin aldehyde	0.0120	0.00070	0.0050	"	0.0120		99.7	16-166	5.44	30
Heptachlor	0.0133	0.0020	0.0050	"	0.0120		111	33-148	4.00	30
Heptachlor epoxide	0.0120	0.0010	0.0050	"	0.0120		99.7	37-142	3.22	30
Methoxychlor	0.0159	0.0020	0.0050	"	0.0120		133	36-148	7.80	30
Surrogate: Dibutylchloredate	0.0393			"	0.0378		104	50-120		

##### Matrix Spike (AH41415-MS1)

Source: 14H0430-01

Prepared: 08/14/14 Analyzed: 08/19/14

QM-05

Aldrin	ND	0.014	0.10	mg/kg	0.0120	ND		51-122		U
alpha-BHC	ND	0.014	0.10	"	0.0120	ND		54-116		U
beta-BHC	0.0489	0.014	0.10	"	0.0120	ND	408	27-193		J
delta-BHC	0.0215	0.012	0.10	"	0.0120	ND	179	64-141		J
gamma-BHC (Lindane)	ND	0.014	0.10	"	0.0120	ND		55-121		U
4,4'-DDD	0.0420	0.040	0.10	"	0.0120	ND	350	46-144		J
4,4'-DDE	ND	0.018	0.10	"	0.0120	ND		57-128		U
4,4'-DDT	0.0269	0.020	0.10	"	0.0120	ND	224	44-154		J
Dieldrin	ND	0.018	0.10	"	0.0120	ND		58-124		U
Endosulfan I	ND	0.040	0.10	"	0.0120	ND		58-125		U
Endosulfan II	ND	0.016	0.10	"	0.0120	ND		51-139		U
Endosulfan sulfate	ND	0.020	0.10	"	0.0120	ND		51-138		U
Endrin	ND	0.040	0.10	"	0.0120	ND		55-158		U
Endrin aldehyde	ND	0.014	0.10	"	0.0120	ND		34-146		U
Heptachlor	ND	0.040	0.10	"	0.0120	ND		42-150		U
Heptachlor epoxide	ND	0.020	0.10	"	0.0120	ND		53-120		U
Methoxychlor	ND	0.040	0.10	"	0.0120	ND		41-157		U
Surrogate: Dibutylchloredate	0.0664			"	0.0378		176	50-120		

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Organochlorine Pesticides and PCBs by EPA Method 8081/8082 - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41415 - EPA 3540C Soxhlet

Matrix Spike Dup (AH41415-MSD1)		Source: 14H0430-01			Prepared: 08/14/14 Analyzed: 08/19/14				QM-05		
Aldrin	0.0145	0.014	0.10	mg/kg	0.0120	ND	121	51-122	30		J
alpha-BHC	ND	0.014	0.10	"	0.0120	ND		54-116	30		U
beta-BHC	0.0217	0.014	0.10	"	0.0120	ND	181	27-193	30		J
delta-BHC	0.0196	0.012	0.10	"	0.0120	ND	163	64-141	30		J
gamma-BHC (Lindane)	ND	0.014	0.10	"	0.0120	ND		55-121	30		U
4,4'-DDD	0.0535	0.040	0.10	"	0.0120	ND	445	46-144	30		J
4,4'-DDE	ND	0.018	0.10	"	0.0120	ND		57-128	30		U
4,4'-DDT	0.0267	0.020	0.10	"	0.0120	ND	222	44-154	30		J
Dieldrin	ND	0.018	0.10	"	0.0120	ND		58-124	30		U
Endosulfan I	ND	0.040	0.10	"	0.0120	ND		58-125	30		U
Endosulfan II	ND	0.016	0.10	"	0.0120	ND		51-139	30		U
Endosulfan sulfate	ND	0.020	0.10	"	0.0120	ND		51-138	30		U
Endrin	ND	0.040	0.10	"	0.0120	ND		55-158	30		U
Endrin aldehyde	ND	0.014	0.10	"	0.0120	ND		34-146	30		U
Heptachlor	ND	0.040	0.10	"	0.0120	ND		42-150	30		U
Heptachlor epoxide	ND	0.020	0.10	"	0.0120	ND		53-120	30		U
Methoxychlor	ND	0.040	0.10	"	0.0120	ND		41-157	30		U
Surrogate: Dibutylchloroendate	0.0674			"	0.0378		178	50-120			

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

##### Blank (AH41320-BLK1)

Prepared: 08/13/14 Analyzed: 08/20/14

Acenaphthene	ND	0.020	0.062	mg/kg						U
Acenaphthylene	ND	0.020	0.062	"						U
Anthracene	ND	0.010	0.062	"						U
Benzidine	ND	0.50	1.6	"						U
Benzo (a) anthracene	ND	0.020	0.33	"						U
Benzo (a) pyrene	ND	0.030	0.062	"						U
Benzo (b) fluoranthene	ND	0.030	0.062	"						U
Benzo (g,h,i) perylene	ND	0.030	0.062	"						U
Benzo (k) fluoranthene	ND	0.050	0.062	"						U
Benzoic acid	ND	0.60	1.6	"						U
Benzyl alcohol	ND	0.20	0.66	"						U
Bis(2-chloroethoxy)methane	ND	0.20	0.33	"						U
Bis(2-chloroethyl)ether	ND	0.20	0.33	"						U
Bis(2-chloroisopropyl)ether	ND	0.20	0.33	"						U
Bis(2-ethylhexyl)phthalate	ND	0.090	0.33	"						U
4-Bromophenyl phenyl ether	ND	0.20	0.33	"						U
Butyl benzyl phthalate	ND	0.20	0.33	"						U
4-Chloro-3-methylphenol	ND	0.20	0.33	"						U
4-Chloroaniline	ND	0.20	0.66	"						U
2-Chloronaphthalene	ND	0.20	0.33	"						U
2-Chlorophenol	ND	0.20	0.33	"						U
4-Chlorophenyl phenyl ether	ND	0.20	0.33	"						U
Chrysene	ND	0.030	0.062	"						U
Di-n-butyl phthalate	ND	0.20	0.33	"						U
Di-n-octyl phthalate	ND	0.20	0.33	"						U
Dibenz (a,h) anthracene	ND	0.020	0.062	"						U
Dibenzofuran	ND	0.10	0.33	"						U
1,2-Dichlorobenzene	ND	0.20	0.33	"						U
1,3-Dichlorobenzene	ND	0.20	0.33	"						U
1,4-Dichlorobenzene	ND	0.20	0.33	"						U
3,3'-Dichlorobenzidine	ND	0.50	0.66	"						U

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Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

##### Blank (AH41320-BLK1)

Prepared: 08/13/14 Analyzed: 08/20/14

2,4-Dichlorophenol	ND	0.20	0.33	mg/kg						U
Diethyl phthalate	ND	0.10	0.33	"						U
Dimethyl phthalate	ND	0.20	0.33	"						U
2,4-Dimethylphenol	ND	0.20	0.33	"						U
4,6-Dinitro-2-methylphenol	ND	0.30	1.6	"						U
2,4-Dinitrophenol	ND	0.20	1.6	"						U
2,4-Dinitrotoluene	ND	0.10	0.33	"						U
2,6-Dinitrotoluene	ND	0.20	0.33	"						U
1,2-Diphenylhydrazine	ND	0.20	0.33	"						U
Fluoranthene	ND	0.030	0.062	"						U
Fluorene	ND	0.020	0.062	"						U
Hexachlorobenzene	ND	0.10	0.33	"						U
Hexachlorobutadiene	ND	0.20	0.33	"						U
Hexachlorocyclopentadiene	ND	0.20	1.6	"						U
Hexachloroethane	ND	0.20	0.33	"						U
Indeno (1,2,3-cd) pyrene	ND	0.020	0.062	"						U
Isophorone	ND	0.20	0.33	"						U
2-Methylnaphthalene	ND	0.020	0.062	"						U
2-Methylphenol (o-cresol)	ND	0.20	0.33	"						U
3 & 4-Methylphenol (m,p-cresol)	ND	0.20	0.33	"						U
N-Nitrosodi-n-propylamine	ND	0.20	0.33	"						U
N-Nitrosodimethylamine	ND	0.30	0.66	"						U
N-Nitrosodiphenylamine	ND	0.20	0.33	"						U
Naphthalene	ND	0.020	0.062	"						U
2-Nitroaniline	ND	0.20	1.6	"						U
3-Nitroaniline	ND	0.30	1.6	"						U
4-Nitroaniline	ND	0.20	1.6	"						U
Nitrobenzene	ND	0.20	0.33	"						U
2-Nitrophenol	ND	0.30	1.6	"						U
4-Nitrophenol	ND	0.30	1.6	"						U
Pentachlorophenol	ND	0.20	1.6	"						U

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Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

##### Blank (AH41320-BLK1)

Prepared: 08/13/14 Analyzed: 08/20/14

Phenanthrene	ND	0.030	0.062	mg/kg						U
Phenol	ND	0.20	0.33	"						U
Pyrene	ND	0.030	0.062	"						U
1,2,4-Trichlorobenzene	ND	0.20	0.33	"						U
2,4,5-Trichlorophenol	ND	0.20	0.33	"						U
2,4,6-Trichlorophenol	ND	0.20	0.33	"						U
Surrogate: 2-Fluorobiphenyl	2.97			"	4.00		74.3	61-117		
Surrogate: 2-Fluorophenol	2.69			"	4.00		67.2	50-113		
Surrogate: Nitrobenzene-d5	2.79			"	4.00		69.8	47-123		
Surrogate: p-Terphenyl-d14	3.15			"	4.00		78.8	63-133		
Surrogate: Phenol-d6	2.67			"	4.00		66.7	49-119		
Surrogate: 2,4,6-Tribromophenol	3.51			"	4.00		87.7	52-129		

##### LCS (AH41320-BS1)

Prepared: 08/13/14 Analyzed: 08/20/14

Acenaphthene	1.30	0.020	0.062	mg/kg	2.00		65.0	35-90		
4-Chloro-3-methylphenol	2.95	0.20	0.33	"	4.00		73.6	55-105		
2-Chlorophenol	2.81	0.20	0.33	"	4.00		70.2	55-100		
1,4-Dichlorobenzene	1.37	0.20	0.33	"	2.00		68.6	55-100		
2,4-Dinitrotoluene	1.38	0.10	0.33	"	2.00		69.1	65-100		
N-Nitrosodi-n-propylamine	1.11	0.20	0.33	"	2.00		55.7	45-80		
4-Nitrophenol	3.06	0.30	1.6	"	4.00		76.6	60-110		
Pentachlorophenol	3.84	0.20	1.6	"	4.00		96.0	42-125		
Phenol	2.72	0.20	0.33	"	4.00		67.9	54-95		
Pyrene	1.37	0.030	0.062	"	2.00		68.7	50-100		
1,2,4-Trichlorobenzene	1.38	0.20	0.33	"	2.00		69.0	55-95		
Surrogate: 2-Fluorobiphenyl	3.36			"	4.00		84.0	61-117		
Surrogate: 2-Fluorophenol	3.16			"	4.00		78.9	50-113		
Surrogate: Nitrobenzene-d5	3.21			"	4.00		80.3	47-123		
Surrogate: p-Terphenyl-d14	3.44			"	4.00		85.9	63-133		
Surrogate: Phenol-d6	3.04			"	4.00		76.0	49-119		
Surrogate: 2,4,6-Tribromophenol	4.07			"	4.00		102	52-129		

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Tracy, City of - Water Treatment Plant  
Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

##### LCS Dup (AH41320-BSD1)

Prepared: 08/13/14 Analyzed: 08/20/14

Acenaphthene	1.43	0.020	0.062	mg/kg	2.00		71.6	35-90	9.52	25
4-Chloro-3-methylphenol	3.29	0.20	0.33	"	4.00		82.2	55-105	11.0	25
2-Chlorophenol	3.16	0.20	0.33	"	4.00		79.1	55-100	11.9	25
1,4-Dichlorobenzene	1.56	0.20	0.33	"	2.00		77.8	55-100	12.6	25
2,4-Dinitrotoluene	1.54	0.10	0.33	"	2.00		76.8	65-100	10.6	25
N-Nitrosodi-n-propylamine	1.26	0.20	0.33	"	2.00		63.1	45-80	12.5	25
4-Nitrophenol	3.40	0.30	1.6	"	4.00		85.0	60-110	10.4	25
Pentachlorophenol	4.16	0.20	1.6	"	4.00		104	42-125	7.96	25
Phenol	3.00	0.20	0.33	"	4.00		75.0	54-95	10.0	25
Pyrene	1.44	0.030	0.062	"	2.00		72.1	50-100	4.83	25
1,2,4-Trichlorobenzene	1.55	0.20	0.33	"	2.00		77.6	55-95	11.8	25
Surrogate: 2-Fluorobiphenyl	3.45			"	4.00		86.2	61-117		
Surrogate: 2-Fluorophenol	3.33			"	4.00		83.2	50-113		
Surrogate: Nitrobenzene-d5	3.32			"	4.00		83.1	47-123		
Surrogate: p-Terphenyl-d14	3.41			"	4.00		85.3	63-133		
Surrogate: Phenol-d6	3.12			"	4.00		78.0	49-119		
Surrogate: 2,4,6-Tribromophenol	4.07			"	4.00		102	52-129		

##### Matrix Spike (AH41320-MS1)

Source: 14H0430-01

Prepared: 08/13/14 Analyzed: 08/20/14

QM-05

Acenaphthene	1.65	1.0	3.1	mg/kg	2.00	ND	82.5	35-90		J
4-Chloro-3-methylphenol	ND	10	16	"	4.00	ND		55-105		U
2-Chlorophenol	ND	10	16	"	4.00	ND		55-100		U
1,4-Dichlorobenzene	ND	10	16	"	2.00	ND		55-100		U
2,4-Dinitrotoluene	ND	5.0	16	"	2.00	ND		65-100		U
N-Nitrosodi-n-propylamine	ND	10	16	"	2.00	ND		45-80		U
4-Nitrophenol	ND	15	80	"	4.00	ND		60-110		U
Pentachlorophenol	16.2	10	80	"	4.00	ND	404	60-115		J
Phenol	ND	10	16	"	4.00	ND		55-100		U
Pyrene	1.65	1.5	3.1	"	2.00	ND	82.5	50-100		J
1,2,4-Trichlorobenzene	ND	10	16	"	2.00	ND		55-95		U
Surrogate: 2-Fluorobiphenyl	3.70			"	4.00		92.5	61-117		

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Tracy CA, 95304  
3900 Holly Drive

Project Manager: Erich Delmas  
Project: WWTP Sludge Drying Beds  
Project Number: [none]

Reported:  
08/21/14 16:15

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

**Matrix Spike (AH41320-MS1)** Source: 14H0430-01 Prepared: 08/13/14 Analyzed: 08/20/14 **QM-05**

Surrogate: 2-Fluorophenol	3.55			mg/kg	4.00		88.8	50-113		
Surrogate: Nitrobenzene-d5	3.60			"	4.00		90.0	47-123		
Surrogate: p-Terphenyl-d14	3.60			"	4.00		90.0	63-133		
Surrogate: Phenol-d6	3.50			"	4.00		87.5	49-119		
Surrogate: 2,4,6-Tribromophenol	4.10			"	4.00		102	52-129		

**Matrix Spike Dup (AH41320-MSD1)** Source: 14H0430-01 Prepared: 08/13/14 Analyzed: 08/20/14 **QM-05**

Acenaphthene	1.55	1.0	3.1	mg/kg	2.00	ND	77.5	35-90	25	J
4-Chloro-3-methylphenol	ND	10	16	"	4.00	ND		55-105	25	U
2-Chlorophenol	ND	10	16	"	4.00	ND		55-100	25	U
1,4-Dichlorobenzene	ND	10	16	"	2.00	ND		55-100	25	U
2,4-Dinitrotoluene	ND	5.0	16	"	2.00	ND		65-100	25	U
N-Nitrosodi-n-propylamine	ND	10	16	"	2.00	ND		45-80	25	U
4-Nitrophenol	ND	15	80	"	4.00	ND		60-110	25	U
Pentachlorophenol	16.4	10	80	"	4.00	ND	409	60-115	25	J
Phenol	ND	10	16	"	4.00	ND		55-100	25	U
Pyrene	1.70	1.5	3.1	"	2.00	ND	85.0	50-100	25	J
1,2,4-Trichlorobenzene	ND	10	16	"	2.00	ND		55-95	25	U
Surrogate: 2-Fluorobiphenyl	3.80			"	4.00		95.0	61-117		
Surrogate: 2-Fluorophenol	3.40			"	4.00		85.0	50-113		
Surrogate: Nitrobenzene-d5	3.65			"	4.00		91.2	47-123		
Surrogate: p-Terphenyl-d14	3.90			"	4.00		97.5	63-133		
Surrogate: Phenol-d6	3.40			"	4.00		85.0	49-119		
Surrogate: 2,4,6-Tribromophenol	4.70			"	4.00		118	52-129		

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Project Number: [none]

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### Additional Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

#### Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch AH41320 - EPA 3540C Soxhlet MS

##### Blank (AH41320-BLK1)

Prepared: 08/13/14 Analyzed: 08/20/14

Pyridine	ND	150	500	mg/kg						U
Surrogate: 2-Fluorobiphenyl	2.97			"	4.00		74.3	61-117		
Surrogate: 2-Fluorophenol	2.69			"	4.00		67.2	50-113		
Surrogate: Nitrobenzene-d5	2.79			"	4.00		69.8	47-123		
Surrogate: p-Terphenyl-d14	3.15			"	4.00		78.8	63-133		
Surrogate: Phenol-d6	2.67			"	4.00		66.7	49-119		
Surrogate: 2,4,6-Tribromophenol	3.51			"	4.00		87.7	52-129		

##### LCS (AH41320-BS1)

Prepared: 08/13/14 Analyzed: 08/20/14

Surrogate: 2-Fluorobiphenyl	3.36			mg/kg	4.00		84.0	61-117		
Surrogate: 2-Fluorophenol	3.16			"	4.00		78.9	50-113		
Surrogate: Nitrobenzene-d5	3.21			"	4.00		80.3	47-123		
Surrogate: p-Terphenyl-d14	3.44			"	4.00		85.9	63-133		
Surrogate: Phenol-d6	3.04			"	4.00		76.0	49-119		
Surrogate: 2,4,6-Tribromophenol	4.07			"	4.00		102	52-129		

##### LCS Dup (AH41320-BSD1)

Prepared: 08/13/14 Analyzed: 08/20/14

Surrogate: 2-Fluorobiphenyl	3.45			mg/kg	4.00		86.2	61-117		
Surrogate: 2-Fluorophenol	3.33			"	4.00		83.2	50-113		
Surrogate: Nitrobenzene-d5	3.32			"	4.00		83.1	47-123		
Surrogate: p-Terphenyl-d14	3.41			"	4.00		85.3	63-133		
Surrogate: Phenol-d6	3.12			"	4.00		78.0	49-119		
Surrogate: 2,4,6-Tribromophenol	4.07			"	4.00		102	52-129		

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Project Number: [none]

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### Notes and Definitions

>	> 16000000
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-04	High RPD and/or poor percent recovery may reflect sample non-homogeneity.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
R-06	The Reporting Limits for this analysis have been raised to account for matrix interference.
R-11	All samples and QC in the batch were analyzed to meet high-level reporting limits.
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interferences.
U	Analyte included in analysis, but not detected at or above MDL.
DET	Analyte DETECTED
MDL	Method Detection Limit
ML	Minimum Level. The concentration equivalent to the lowest calibration standard, if all method specified weights, volumes, and processing steps have been followed.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RL	Reporting Limit
RPD	Relative Percent Difference

